

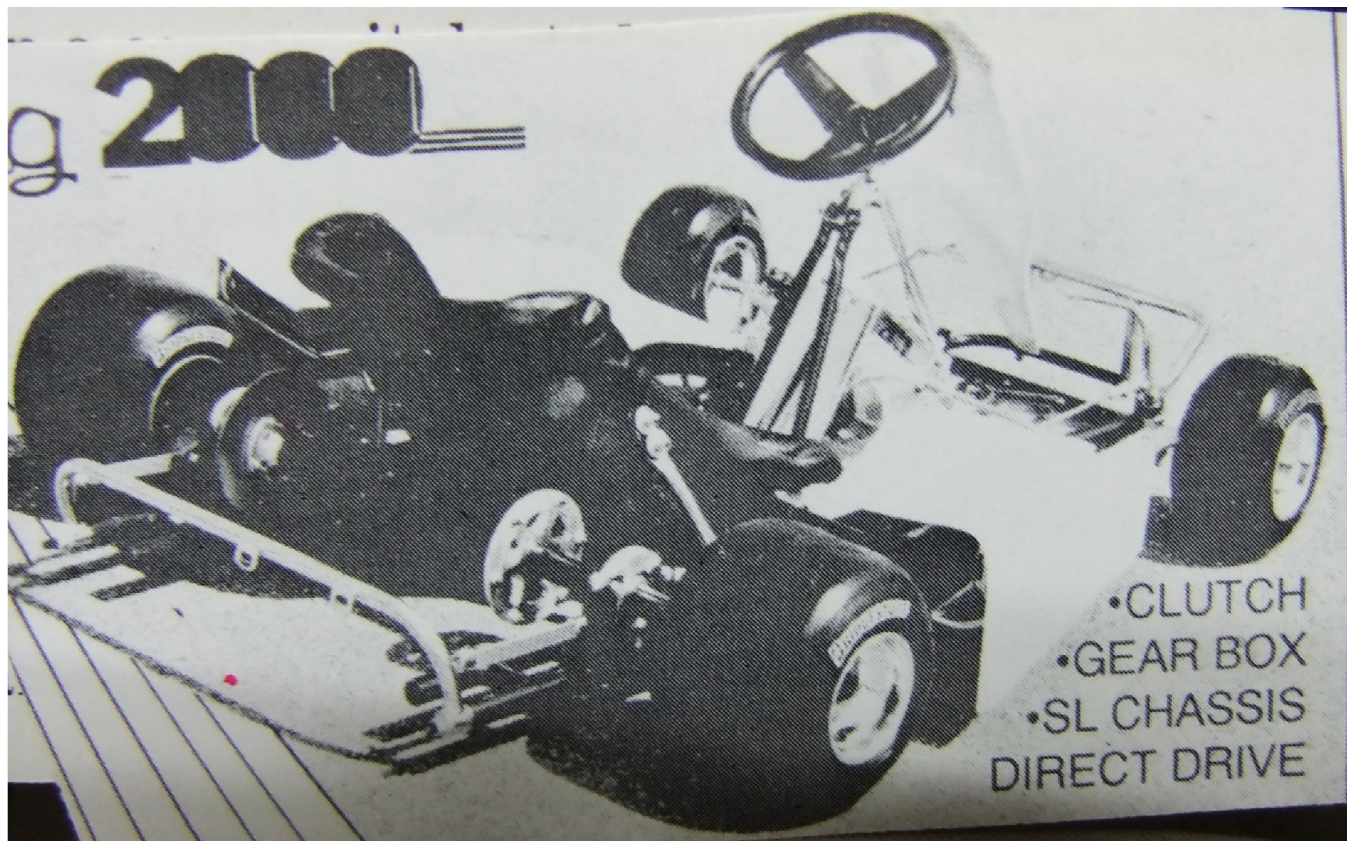
KAT KART

Kat Kart es una pequeña empresa que organiza carreras de karts para empresas, fiestas familiares, fiestas mayores de pueblos , fiestas de centros comerciales y fiestas en colegios.



Foto 159

**Kat Kart dispone
de cuatro karts de motor .**



Nos desplazamos hasta el lugar del evento y montamos el circuito ,

organizamos las carreras,

damos unas clases básicas de pilotaje de karts (entregando a los participantes unas cuantas páginas escritas detallando las técnicas básicas de pilotaje)

y al final de la fiesta, desmontamos el circuito

y limpiamos la zona.

**Nos contratan con frecuencia
Ayuntamientos de pequeños pueblos que
disponen de una zona llana amplia para
montar el circuito o de un campo de fútbol
de tierra**



**o bien de algún polígono industrial libre de
farolas y árboles donde se pueda preparar
el circuito,**

contando nosotros con material de protección como balas de heno y colchones de aire para instalar en los lugares más peligrosos del lugar, delante de las farolas o los árboles.

Organizamos en la fiesta mayor de esos pueblos unas carreras de karts para la gente del pueblo.

También nos contratan centros comerciales que disponen de un amplio aparcamiento,

el cual acondicionamos como circuito en las ocasiones en que estos centros comerciales ofrecen fiestas para sus clientes o para promocionar sus productos.



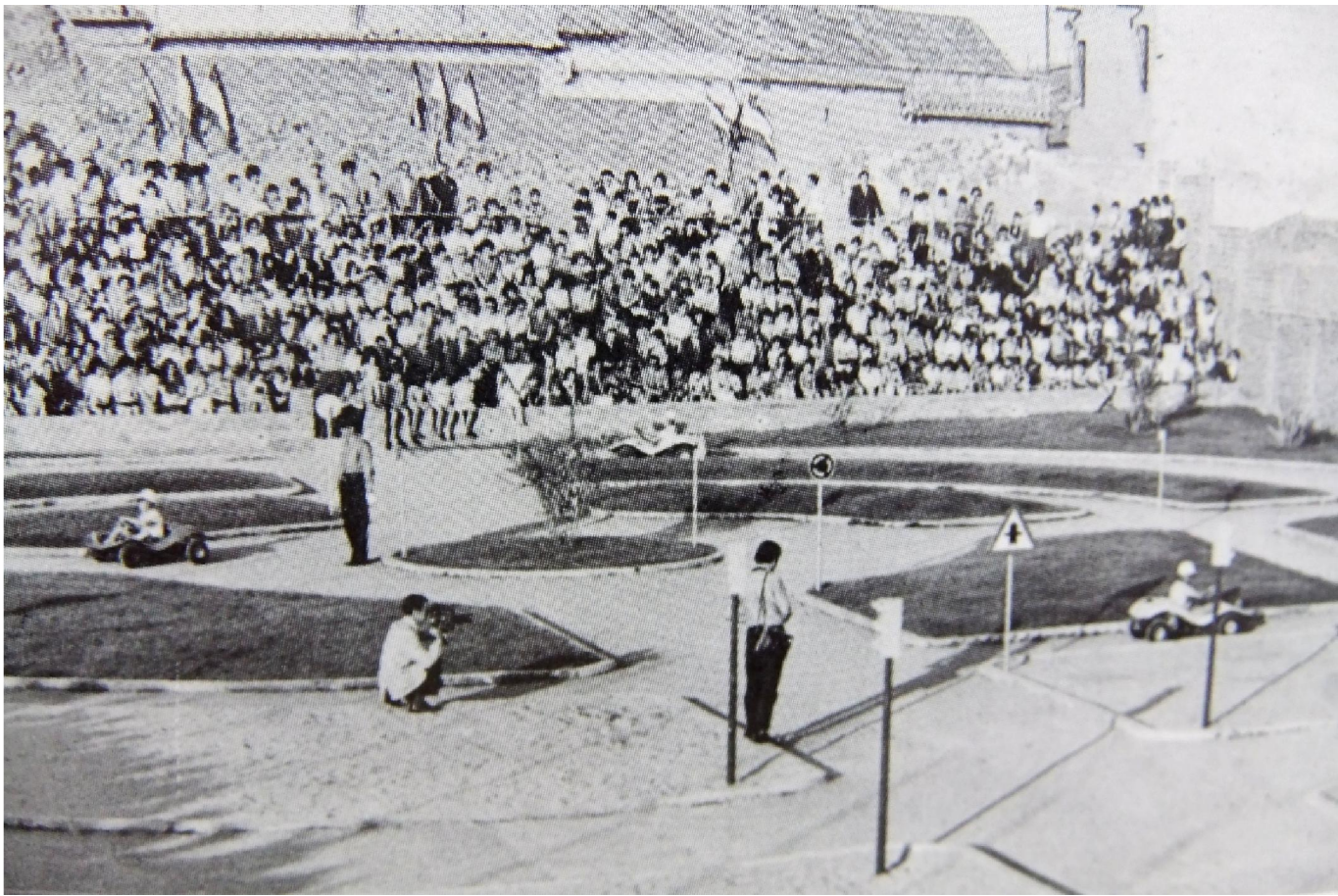
En las fiestas privadas familiares organizamos carreras de karts para la familia y los amigos, en algún lugar llano cercano al domicilio o en un polígono industrial.



También estamos en ferias y otros eventos deportivos .



En los colegios, organizamos carreras de karts en el campo de fútbol del colegio, en las fiestas de fin de curso.



El precio de nuestros servicios es de 100 euros por día, incluyendo todos los trabajos de organización de las carreras , mantenimiento de los karts, montaje y desmontaje del circuito y limpieza del sitio al acabar.

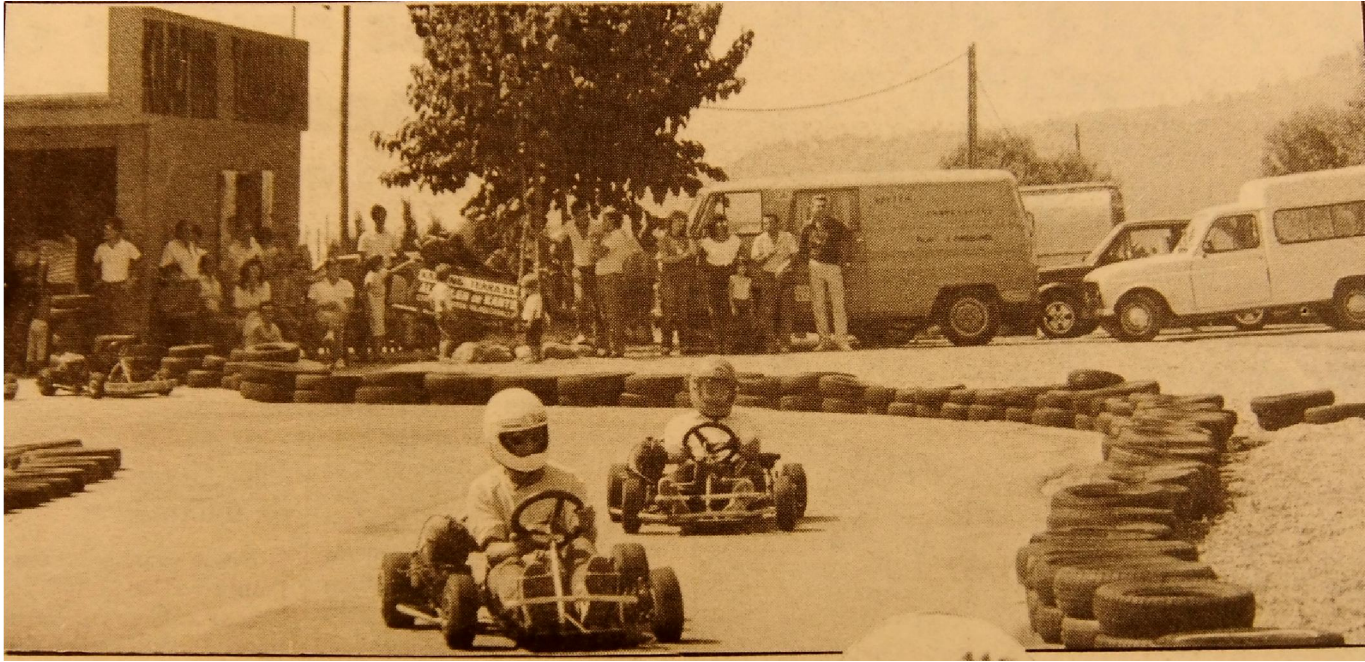


Concerniente a la seguridad, estos karts no alcanzan grandes velocidades por lo que es difícil que se de un accidente peligroso con ellos.

Disponemos de extintores en caso de incendio y todos los karts llevan cinturón de seguridad y casco para el piloto.

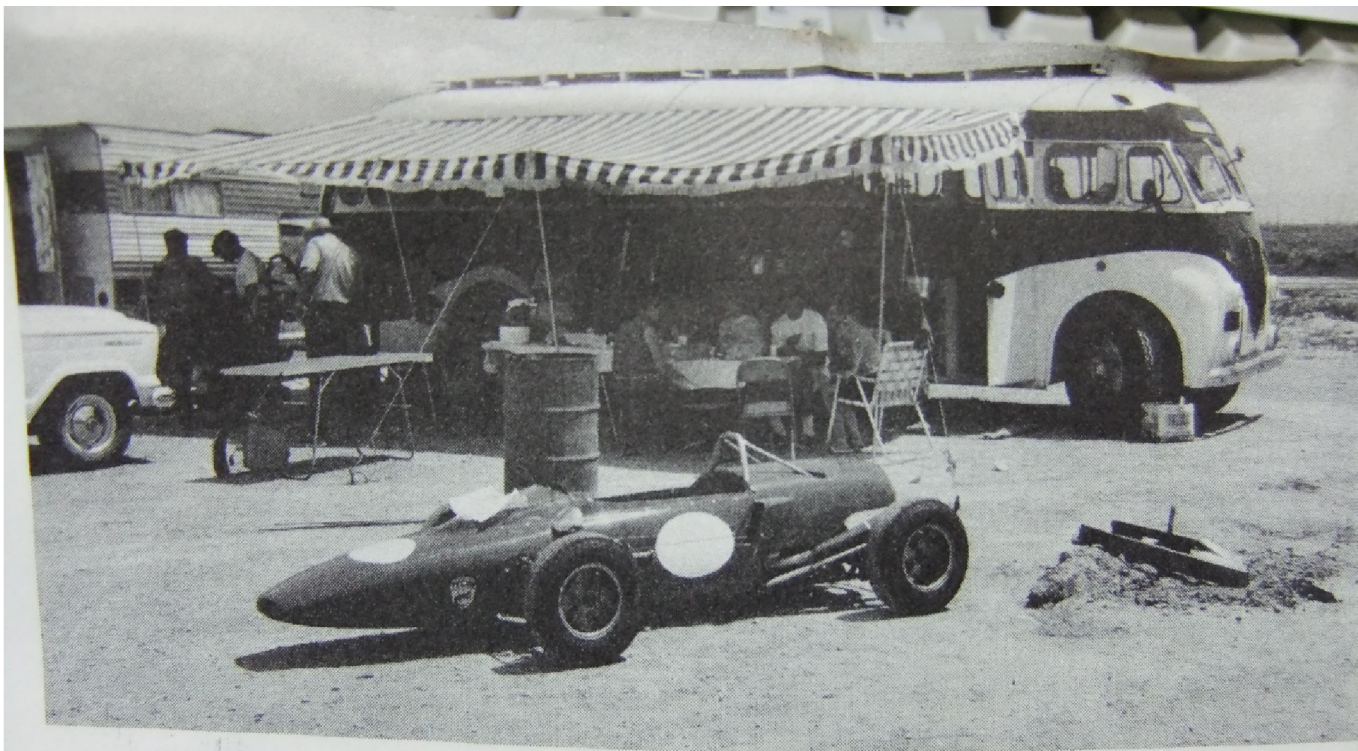
Información y contratación :

cacotanasia@hotmail.com



Notas :

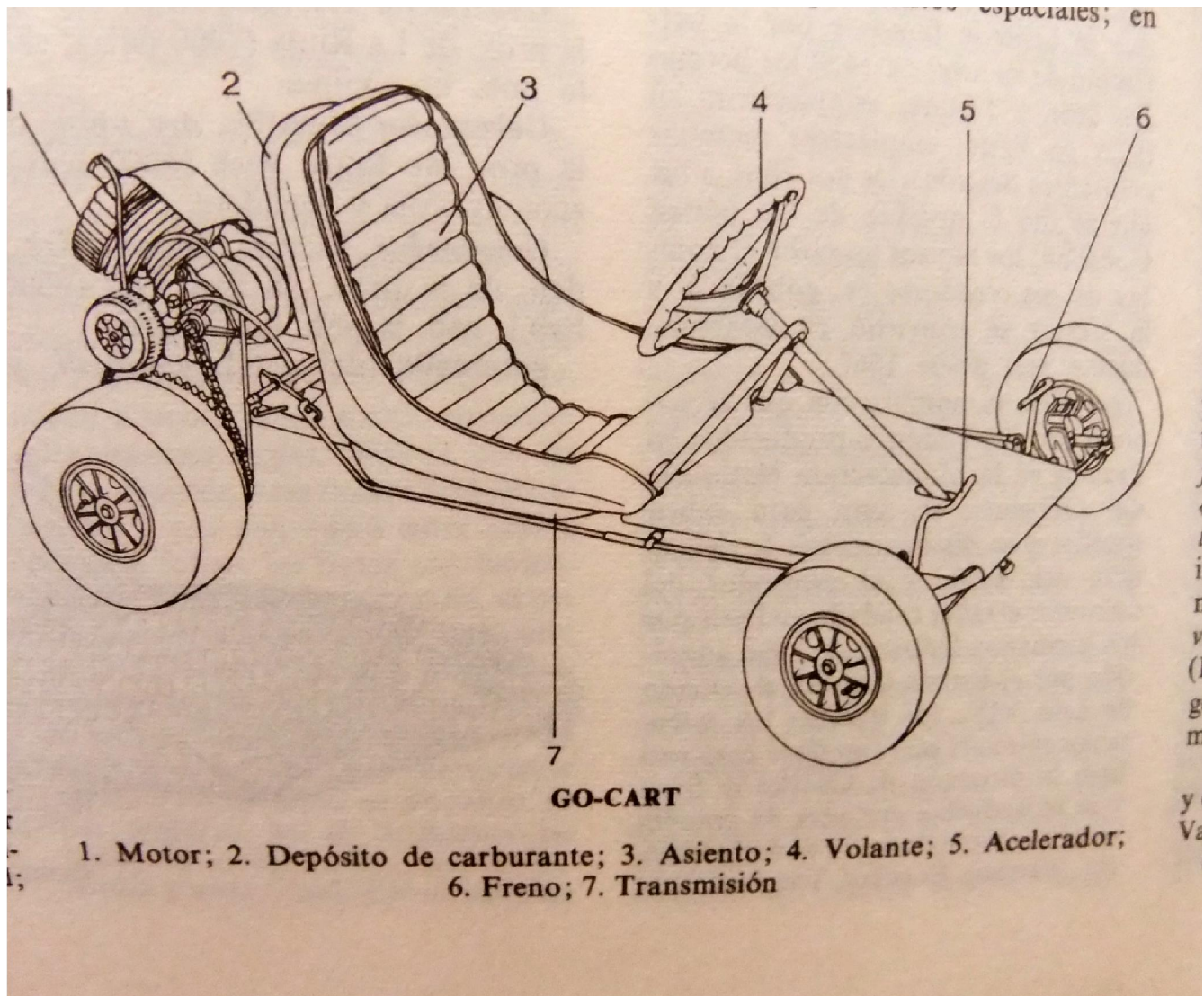
A principios de los años 60, existían en USA autocares que transportaban karts a los pueblos de ese país y organizaban carreras en las afueras de esos pueblos.



The way to go to enduro kart racing in the West is by converted bus, with shade table.

Los karts fueron inventados en los años 50 como una alternativa económica a los

autos de carreras que cada vez eran más caros y asequibles solamente para millonarios.

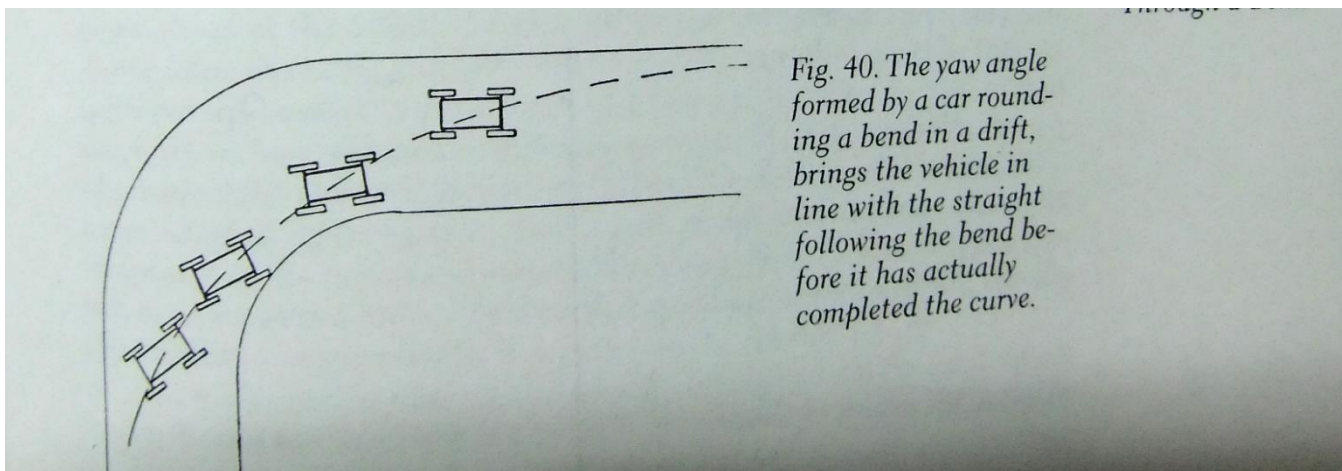


Un kart es solamente cuatro ruedas y un motor de motocicleta. No hay suspensión ni cambio de marchas. Al estar muy cerca

del suelo, la sensación para el piloto es semejante a pilotar un monoplaza de fórmula.

Sin embargo, la técnica de pilotaje es distinta porque los karts derrapan fácilmente en las curvas.

Un piloto de monoplaza de fórmula puede trabajar con muchas más técnicas que un piloto de kart que prácticamente solo puede usar las técnicas del derrapaje y del contravolante.



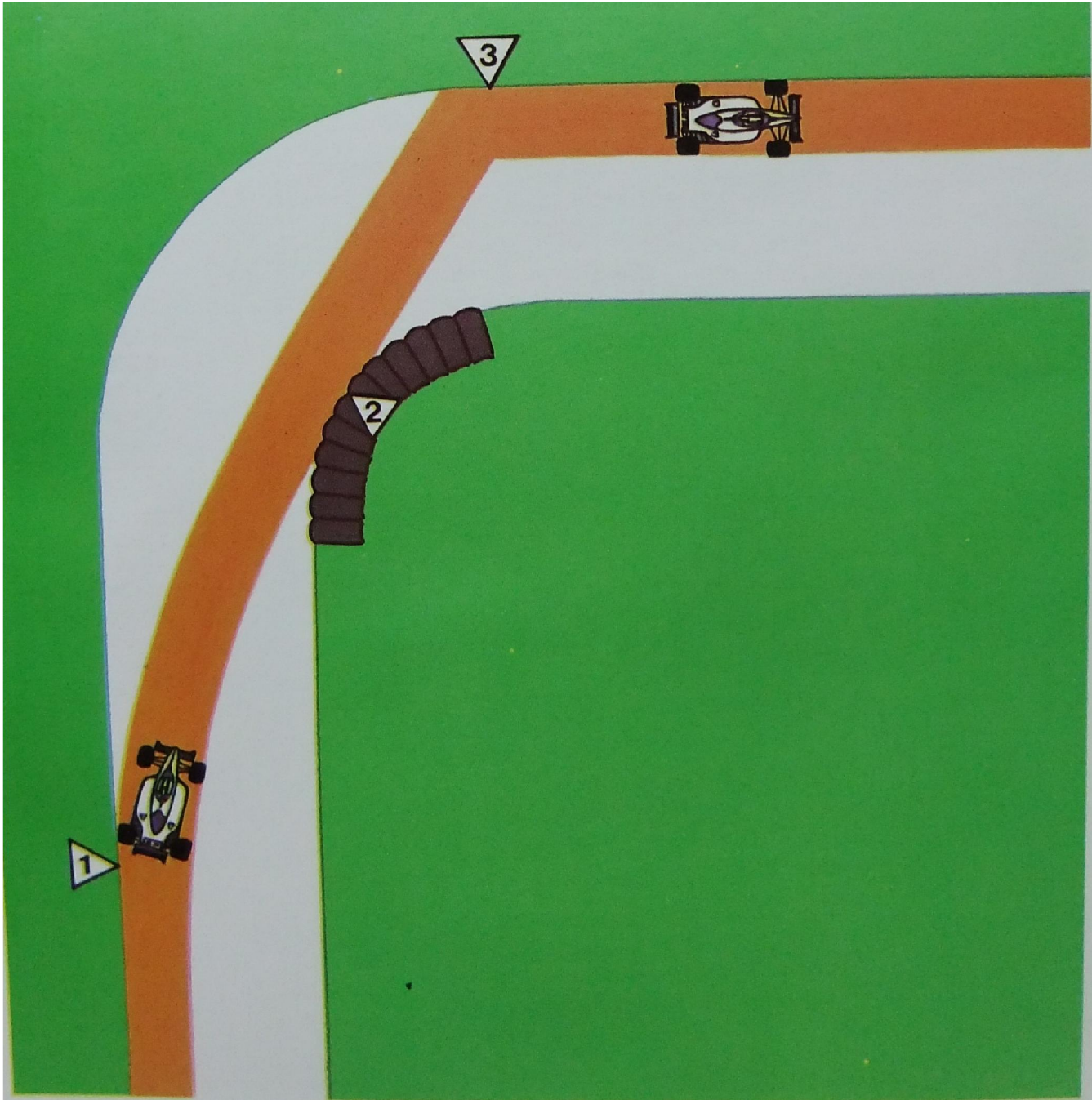
Aún así, muchas de las sensaciones que experimenta un piloto de kart son iguales a las que vive un piloto de fórmula.

«TODO RECTO»,
O TRAYECTORIA DE EMERGENCIA

Los pilotos utilizan sistemáticamente esta trayectoria –sea cual fuere el tipo de viraje– cuando surge un problema mecánico grave (desequilibrio del coche, disminución de la eficacia de los frenos) o a continuación de un craso error de pilotaje (llegada demasiado rápida después de un comienzo tardío de frenado).

Entonces giran mucho más pronto para prolongar al máximo el final de la recta. De este modo pueden

beneficiarse de una zona de frenado algo más larga (a veces el doble), lo cual les proporciona más tiempo para recuperar el control del vehículo. El volantazo no se efectúa hasta el último momento. La trayectoria de emergencia implica una pérdida importante de tiempo, puesto que sacrifica totalmente la eficacia: se trata, en efecto, de buscar una estrategia que permita evitar, ante todo, una salida de pista.



La época clásica de los karts se dio en los años 60, cuando muchos aficionados se fabricaban sus propios karts con ruedas de motos y un motor de motosierra.



La velocidad de esos aparatos era moderada y los circuitos se podían improvisar en cualquier aparcamiento.



El karting era sobretudo un entretenimiento barato y divertido en que las carreras discurrían entre derrapajes y adelantamientos constantes entre todos los participantes.





Getting to the race is really a part of the technique. Well-prepared transport can convince competition you mean business.

can into the corner, and driving through it smoothly. How fast you can accelerate out of the corner then becomes doubly important. Again, pick a reference point adjacent to where you normally start accelerating, then try to get on the throttle sooner. Somewhere in this practice you'll discover your own best driving technique. For some it is slowing sooner for the corner but coming out of the turn like a tiger; for others it is diving into the turn and coming out meekly. If you learn how to do both, you're ready to challenge anyone in the curves as well as on the straights.

Drifting, or sliding, around a corner is the next step up from this smooth technique just developed, and it will almost always be just a fraction second slower. However, it may be necessary to get around the entire track faster. For instance, a full four-wheel drift may position the kart with good acceleration in a better groove for snapping up competitors out of a tight turn.

To start a controlled slide, which can be practiced on dirt at much slower speeds, come to the limit of the corner approach at the normal speed. Turn the front wheels into the turn just a bit sharper than normal, which will cause the rear wheels to break loose at the beginning of a spin-out. Now turn the front wheels back in the opposite direction, just as you would when correcting for a skid on ice or snow. Since the approach will probably be from the extreme side of the track and pointing toward the inside edge of the turn, the turn exit will be at the outside edge of the track again. With the slide, the greatest amount of front wheel "correction" will come just about the time the kart approaches the inside track edge, and will begin to lessen as the kart slides toward the outside edge. It is necessary to use throttle during a slide, because traction limits are being balanced against centrifugal force. However, this is a very slight amount of throttle. Add more power and you're into a full four-wheel drift.

In the four-wheel drift situation, the kart will actually be crossed up through the corner. The front wheels will be turned into the slide, but they are also sliding sideways. It is imperative to have lots of rear tire traction and power for a full drift, and it is the ultimate in spectacular driving common to dirt trackers. Interestingly, because the four-wheel drift requires power throughout the corner, it is perhaps the fastest way to get around a turn. It is also the most delicate and will devour tires. Some kart chassis will drift much better than others, and some kart drivers never seem to learn the precise balance between too little and too much power.



cars were popular with a small group of enthusiasts, they were not really adaptable to diverse competition, nor were they real family vehicles. Karts were not an evolution of these midget-type racers, although they do have a race car heritage.

The kart was invented in 1956 by Art Ingels, a craftsman working at the time for Frank Kurtis of Indianapolis racer fame. Art was engrossed with building Kurtis Roadsters for the annual Brickyard 500-mile race, cars generally conceded the world's ultimate in quality workmanship. At his disposal was a considerable amount of salvage tubing, and in the corner a surplus two-stroke West Bend single-cylinder engine originally intended for a lawnmower. The idea persisted that this engine could be utilized on some kind of little car, a

tiny vehicle that could be used to putt around race track pits or the garage parking lot.

The result was much more spirited than expected. Vehicle weight was well under 100 pounds and Art tipped the scales right at 210 pounds. The little 2½ horsepower engine scooted Art over the pavement at 30 miles per hour, a speed that seems more like 60 when the driver is so close to the ground. Barely long enough for an adult to double up in, the kart didn't turn a corner, it darted around. Other Kurtis workmen and friends took rides on the popper and immediately began construction of their own karts, carbon copies of the original. The sport was born.

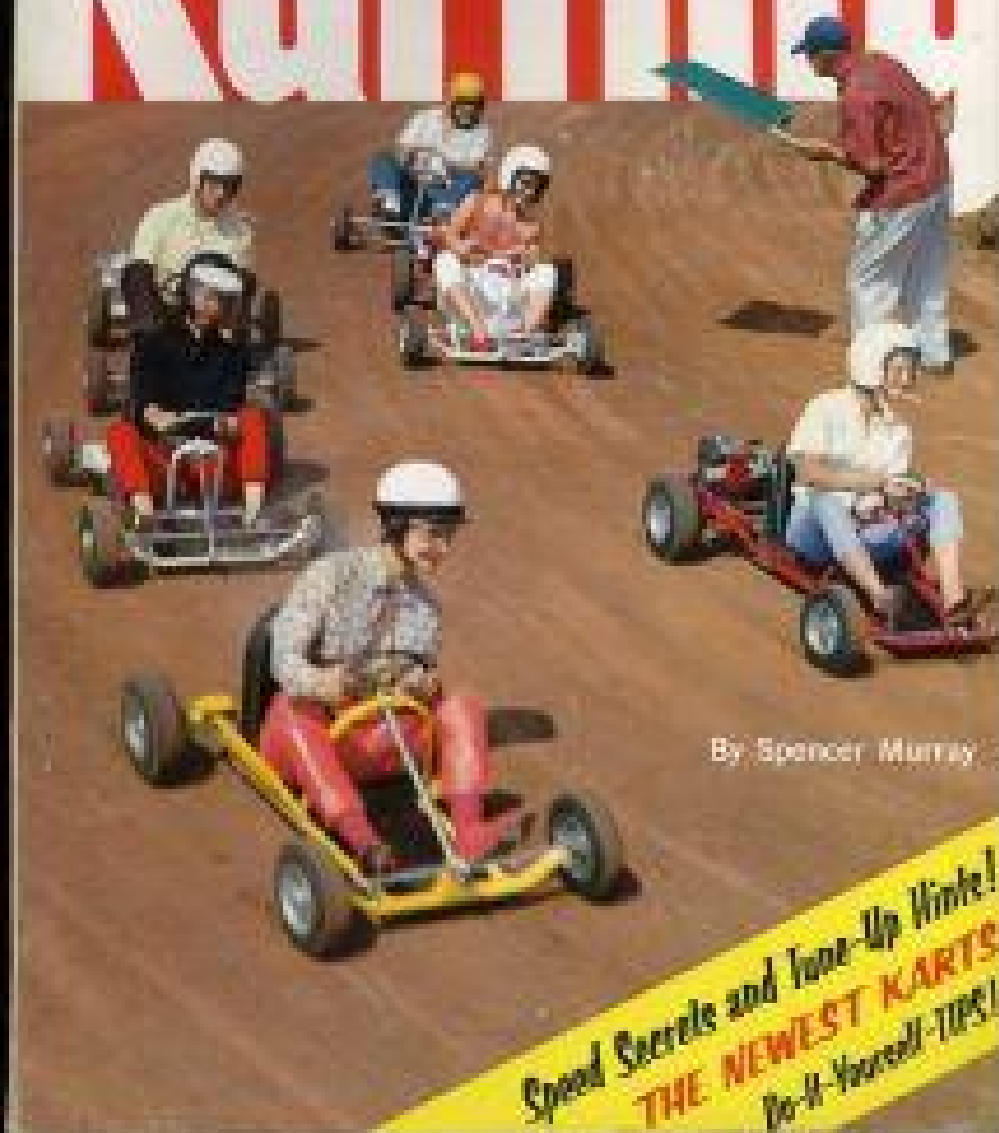
At first Art tried to convince Kurtis of the commercial prospects of the little kart, but Kurtis wasn't listen-

LET'S GO-

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Karting



By Spencer Murray

Speed Secrets and Tune-Up Hints!
THE NEWEST KARTS
Do-It-Yourself-Tips!



Dirt tacking is something else and requires a bit more bravado because karts are usually in a sideways skid.

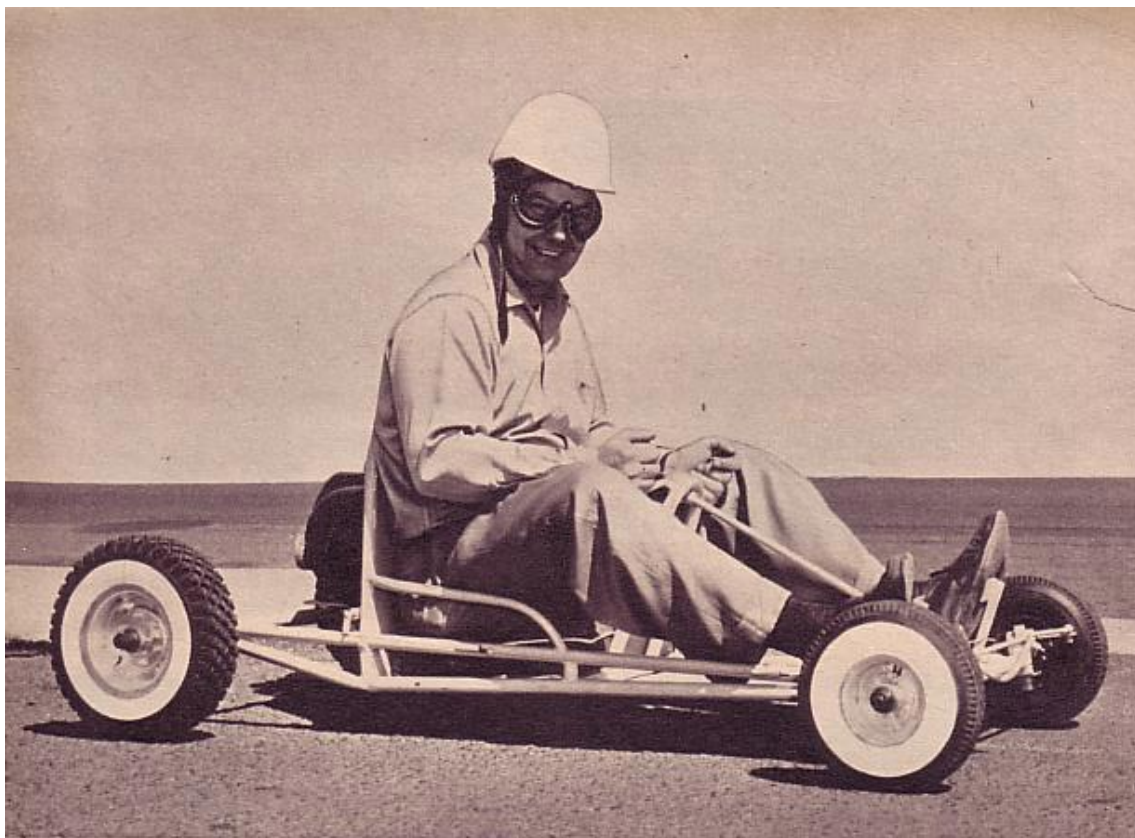
gritting the teeth and boring into the corners full-steam; it means driving quickly and with finesse. A beginner can usually accomplish this after about 30 minutes preliminary practice. Now change the tire air pressure by just four pounds and try the same course with the same driving technique. It will be different. Which is the whole point of practice, learning to distinguish the difference in how a kart will handle under different conditions.

It is very easy to be overly enthusiastic about driving and spend too much time in the seat. Always take an occasional breather to relax and straighten the legs and back. As a rule, trying to drive for more than an

hour's time during any one tour will leave legs cramped and sore for several days. Several years ago a group of kart drivers embarked on a long-distance endurance test to prove the reliability of karts. After seven days and nights of constant driving they had totaled 5,240 miles around a 2½-mile road race course. No driver spent more than one hour at the wheel, most stopped for replacement after 30 minutes.

After the karter is familiar with his machine, and has some time just learning how the kart will handle, it is time to get out on the track. Things will be totally different here, because the course may be only eight or ten feet wide. Unlike the forgiving parking lot, wandering off the asphalt at speed may lead to a dusty spin-out. The detour will be bumpy at best, since the kart has no suspension and only 2½ inches ground clearance. Most courses line the tougher corners with hail bails, which aren't exactly soft but they do save bruises and pride—even the best of drivers kiss the hay occasionally.

Some tracks offer a special training period, or a time where the beginner can tootle around the course to his heart's content, at any speed he wants to travel. This usually will cost a small fee, quite reasonable, and will cover insurance. The new karter is now on his way to learning the mysteries of going slowly but quickly. At first, he will want to grip the steering wheel hard and barrel full-bore through the corners, broadsliding in the finest A. J. Foyt dirt track fashion. Spectacular, but slow. It also tends to make the driver gun-shy. Curves become fire breathing monster pits, ready at any moment to devour kart, driver, and courage. While spin-



BUILD MI's KART

A 2½-hp lawn mower engine drives this kart at more than 30 mph. It's Class A fun for anyone.

By S. Calhoun Smith

THE "go kart" has taken the U. S. by storm. A happy wedding of lawn mower engine and steel tubing on four little wheels, it has become a craze among kids and adults with a yen for racing or just plain driving fun.

Kart racing originated in California and has spread eastward since 1956. Now the GKCA (Go Kart Club of America) is firmly established and has set up sensible rules governing design and power for stable, safe "karting." Even the lowest powered Class A, 2½-

hp karts are capable of 30 to 35 mph with an adult aboard and more when driven by a lightweight 10-year-old. Races are run on paved parking lots and small dirt ovals and regular sports car type raceways have been built with tracks four-tenths of a mile in length and 20 feet wide. Such tracks incorporate eleven turns, both banked and flat.

The MI Kart was designed and built by Bob Peru of Red Bank, N. J. and can be considered a basic Class A kart. It complies in all respects with GKCA



When drivers come into turn too fast they will cause four-wheel drift just to slow kart down. It is also used to set up for coming out of turn. RIGHT: Finding the groove on a track may mean driving right on the edge of the pavement.

caused by tenseness. Relax. Take a very light grip on the steering wheel and enjoy the ride. Control will improve immediately. By comparison, the kart is steering sensitive much like a small economy car with power steering assist. At first it is almost a matter of driving with the finger tips rather than the full hand.

The seating position has much to do with learning to drive. Many beginners, especially children and women, tend to lean forward over the steering wheel. This "elbows up and flailing" posture is tiring; it encourages muscle tightness; and the driver finds it hard to control the kart. Lean back against the seat and let the arms relax. Steering then becomes a matter of flicking the wrists and the body is not thrown about violently by direction changes.

It won't take many laps to learn that a kart is steered as much with the body as with the steering wheel, the exception being laydown Enduro designs. The center of gravity will

change as the body leans to either side or forward. Weight transfer can be modified extensively by throwing the body around. As a good practice, start on a dirt surface and charge into a hard left or right turn. Keep the body rigid and note how the kart spins out. Next lean into the turn and note how the spin-out is modified. This is the beginning of body english, and the amount used will depend on the individual—some drivers are acrobats in the seat, others make almost imperceptible movements. While practicing, note how easy it is to "throw" the kart into a skid or drift. Just as the wheels are turned sharply, lean into the turn with the upper body and throw the posterior toward the outside. The lower body movement will be slight, but the sudden weight transfer will tend to break the rear wheels loose on both dirt and asphalt.

Set up an imaginary course and drive it until all reactions are smooth and coordinated. This doesn't mean

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performance, safety and
value in the industry.
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*Minimum order quantity for 2000 is 2500.



FOR FAST TRACK COMPETITION

Best buy in the medium price range. New features, including just named the "2000" track the steepest corners at high turning speeds without lifting a wheel. New steering column, suspension and hub are removable steering wheel is of special racing design. Suspension is custom fitted and deeply padded. Mount the "2000" with one of McCulloch's 3 rear foot engines and you're off a fast track winner and you'll be proud to drive.

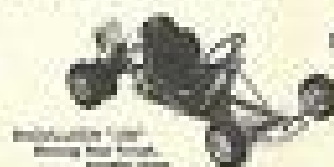
2000 SPECIFICATIONS: Frame 1 x 200 steel, single tube construction with added strength in critical areas. Wheels 17" front and rear, lightweight magnesium alloy. Brakes (McCulloch Disc) aluminum, adjustable. Rider Seat 17" steel, full backrest. Steering Bar Special Action-type racing bar. Dimensions: length 34" Wheel base 44" Front wheel width 2 1/2" Rear wheel width 32"

Height 24 1/2" Front tires 8-40 x 9 x 5 inches. Rear tires 8-40 x 9-40 x 9 inches.



1. NEW DEEP SUEDE SEAT. Matching two-tone red and black cushions with black foam inside padding mount McCulloch's custom-designed seat. One is smooth, one is textured, one is rugged, rugged, rugged.

2. NEW TAPERED ADJUST. Attached directly to the side and is shock mounted to the frame to reduce vibration, shock jolting and give a smoother ride.



McCulloch 100
Racing Kart
Racing Kart

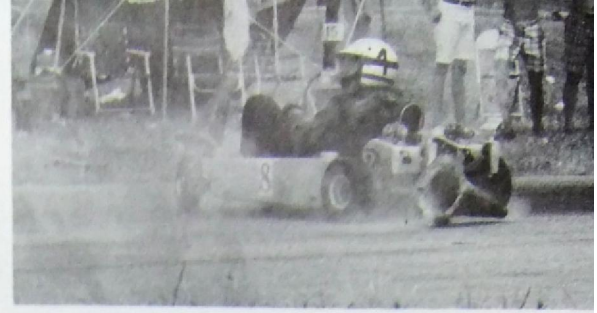
NEW McCULLOCH 100 RACING KART

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For free literature on karts and engines, write McCulloch Corporation, 8825 W Century Blvd., Los Angeles 35, California.



Getting off the line, and through tight corners, usually calls for a bit of hand choking to keep mixture rich. RIGHT: Karts must go through a scoring gate in single file. Sometimes the attempt to slow down ends in a spectacular slide.

very definite "groove" which gives the fastest time. This is the place the expert driver wants to be all the time if possible. Once the karter finds the groove, he will find it requires the least amount of sliding possible. A slight improvement in kart time per lap will begin to add up to a considerable gain over the span of a normal race.

While trying to drive around a corner instead of sliding through it is the prime advice, there remains the requirement for knowing how to control a kart in all phases of drifting. It is possible to go through any given corner considerably faster than thought possible—but it takes nerve to find the ultimate limit of ability. And this is essentially the difference between champion drivers and the also-rans. There is an area of high performance where the vehicle and driver operate as an extension of each other, the place where tire adhesion is somewhere between good and none, where time seems to stand still and yet is counted in hundredths

of a second, a place where the really good driver feels completely relaxed and almost detached. When the advanced driver is in this state of competition, he reads the track and the conditions without taking time to acknowledge the assessment. He learns to act or to react to a situation, but never out of habit.

Learning how to drift a kart is a preliminary to this ultimate performance, for the sensation of a drift is very similar to that of maximum performance. Most drivers establish a reference point on the course which they use throughout a race. In some sports car races, corners are marked with signs showing how many feet remain before the actual corner begins. The driver learns during practice just how far into the chute he can go before shutting off, and he knows that this distance will change as brake fade sets in and vehicle weight lessens with gasoline consumption. Tire temperature and air density will also be factors to consider. The point is that the driver

outs and dumps on a corner are common, they aren't really dangerous (assuming the driver has full-protective clothing and helmet). But the pride is bruised, and the beginner begins to fight every curve, every S, every deviation in the road. He isn't relaxing.

Every successful kart driver stresses a single point about any form of competition driving—*drive around the corner, do not slide*. All the time the wheels are sliding, time is being lost on that lap. Obviously there are times when a two-or four-

wheel drift is necessary, but this won't be on every corner.

The only real way to tell how well you are improving is to time yourself around the track, and this means putting in lots of time on the course. Since most tracks have slack time, this isn't too difficult, but the beginner may be learning only that track and not learning how to drive. That is, getting around fast becomes habit, without understanding how or why. Every track is different, and every driver will tour each track in a different way. But for all, there will be a

must constantly be making corrections for cornering technique.

To start a drifting practice, learn exactly how fast the corner can be negotiated normally. During a typically "hot" lap, note exactly where you shut off in the approach. This may be a mark on the pavement, or a hay bale, anything. It is strictly for reference. Next pick another point slightly farther into the chute, and make a few laps. Keep this up,

moving closer and closer to the actual corner at speed before getting off the throttle. It's guaranteed to cause a few gray hairs, but it will build confidence in machine and technique. The limit will show when you can't make the corner without spinning out. For the time being, that's your ultimate shut-off point. After more practice, you'll get to actually enjoy boring so deeply into the corner.

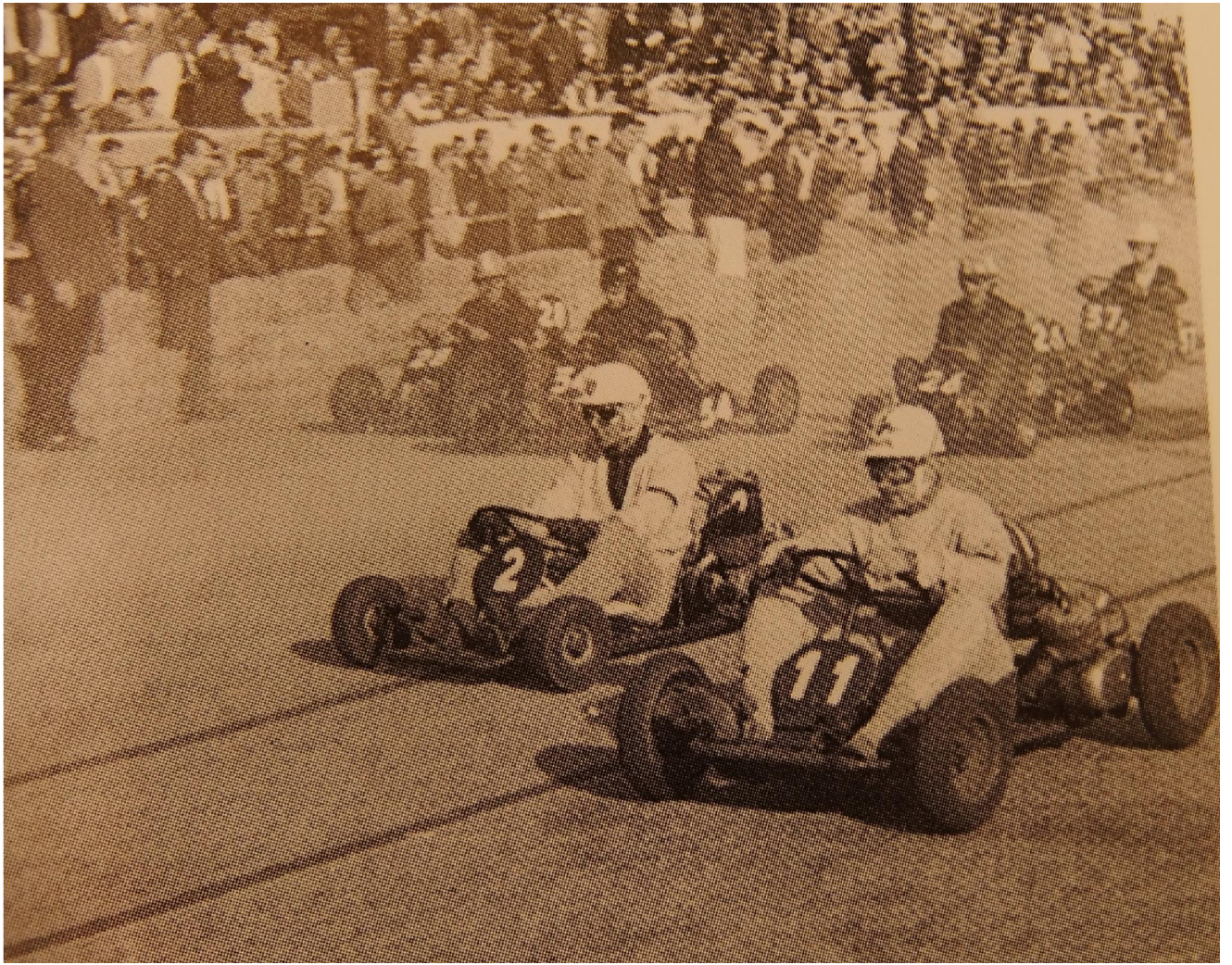
You're now going as fast as you

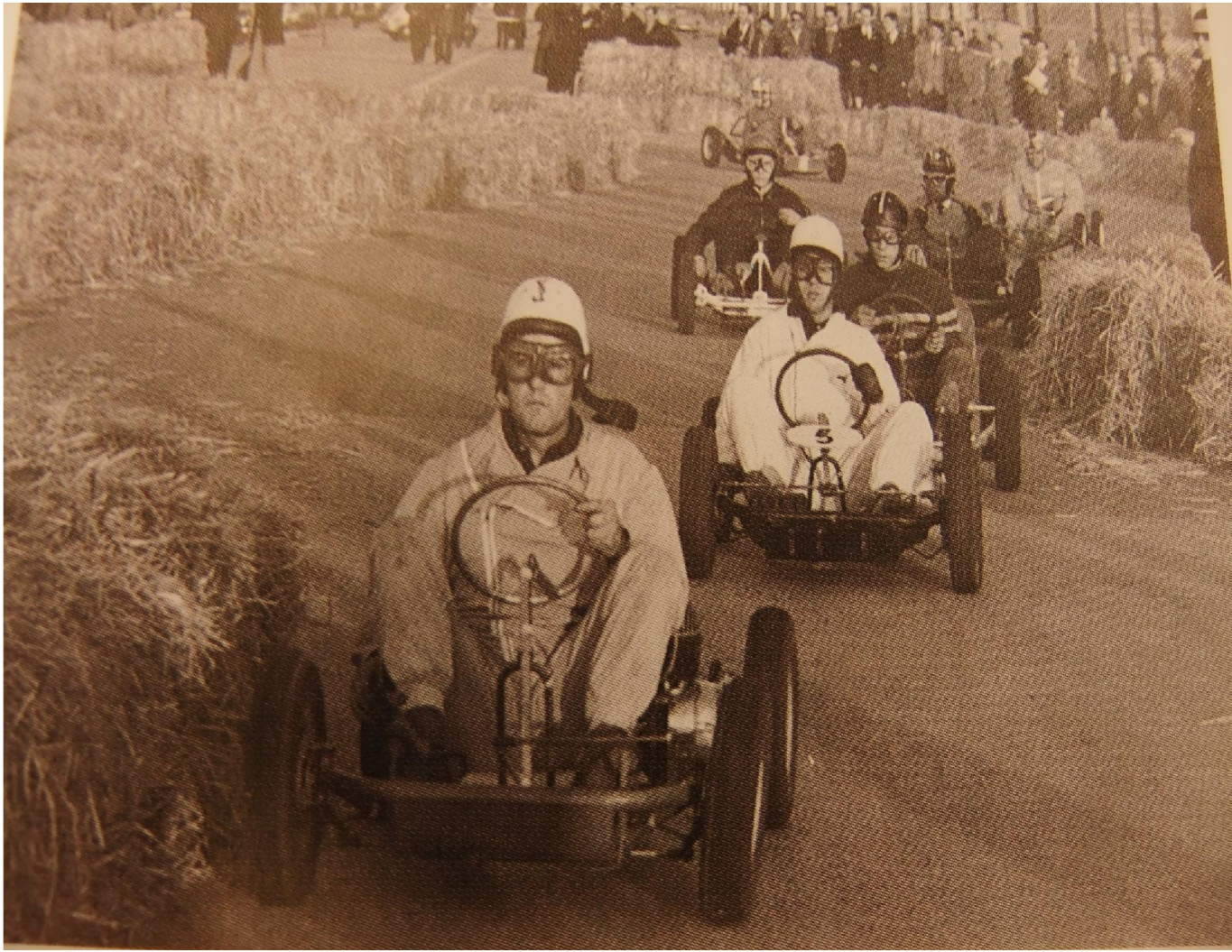
How a kart will handle on a Sprint track depends on how well the chassis is set up for that track. Most drivers like to "wedge" the chassis. If the track has more right turns than left, it is possible to set the chassis on a block and jump on a corner to bend it. This will allow weight transfer earlier on a particular wheel, to take advantage of the extra right-hand curves. Nothing in the way of a fool-proof formula here, just experience.

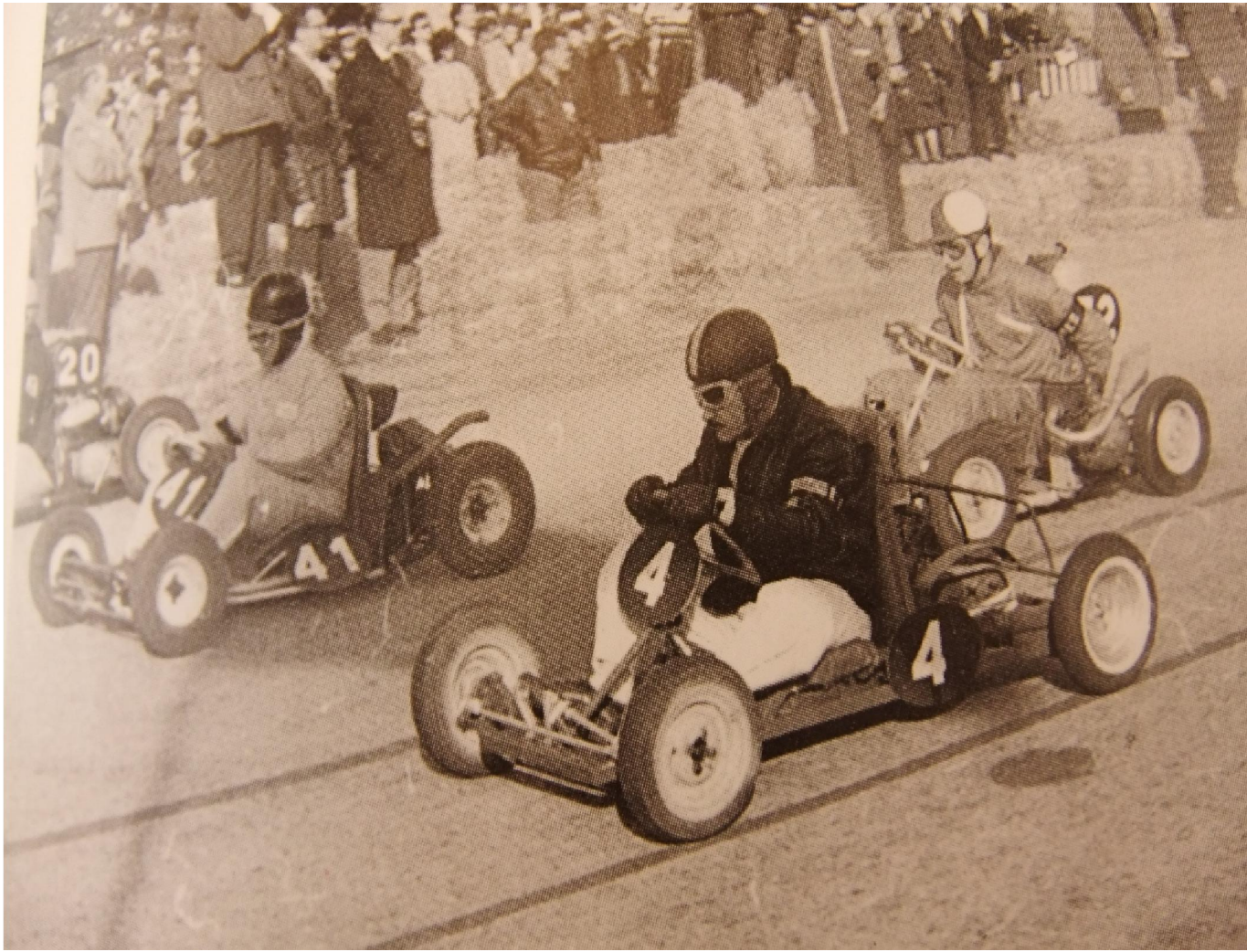
The Enduro driver will recognize comfort as a problem, so he may carry a small plastic water bottle strapped to his waist with a flexible drinking hose attached. He may have a couple of sugar cubes for longer

grinds. He'll certainly learn how to take advantage of the long straights and flex his legs, arms, and feet to circumvent cramps. Because mechanical problems always seem to occur at the furthest possible point from the pits, the Enduro driver will usually carry a spare chain, a pair of channel-lock pliers, a screwdriver, some safety wire, and a spare spark plug.

Very few karters ever drive their particular machine to its limit, because they have seldom taken the time to experiment with what it will actually do. Some time off by oneself on an empty track can be tremendously profitable. A good kart driver never stops learning.







Fotos de karts autoconstruidos en España a principios de los años 60 con unas ruedas y motor de motocicletas.

Eran karts bastante rápidos en las rectas pero en las curvas la prudencia aconsejaba a los pilotos abordarlas a poca velocidad, por el peligro de volcar que amenazaba constantemente a estos karts.

En los años 70 empezaron a surgir las fábricas de karts que buscaban la máxima velocidad y potencia de los motores, así como chasis lo más estables y afinados posibles.

Los motores se especializaron en tener mucha “pegada” o patada para poder colocar el kart atravesado en las curvas , derrapando,

y los chasis cada vez fueron más anchos y casi tocando el suelo,

para impedir el accidente más peligroso en los karts, que era el volcar en una curva.

Los chasis se construían con precisión milimétrica y los mejores chasis eran los que acababan ganando las carreras ,

aunque no duraban mucho tiempo pues con los choques con otros karts en carrera se deformaban ligeramente , dejándolos inútiles para una conducción “ angelical” como les gustaba a los pilotos de karts de esos años, que pasaban por las curvas como si no existieran, como flotando o deslizándose por ellas.

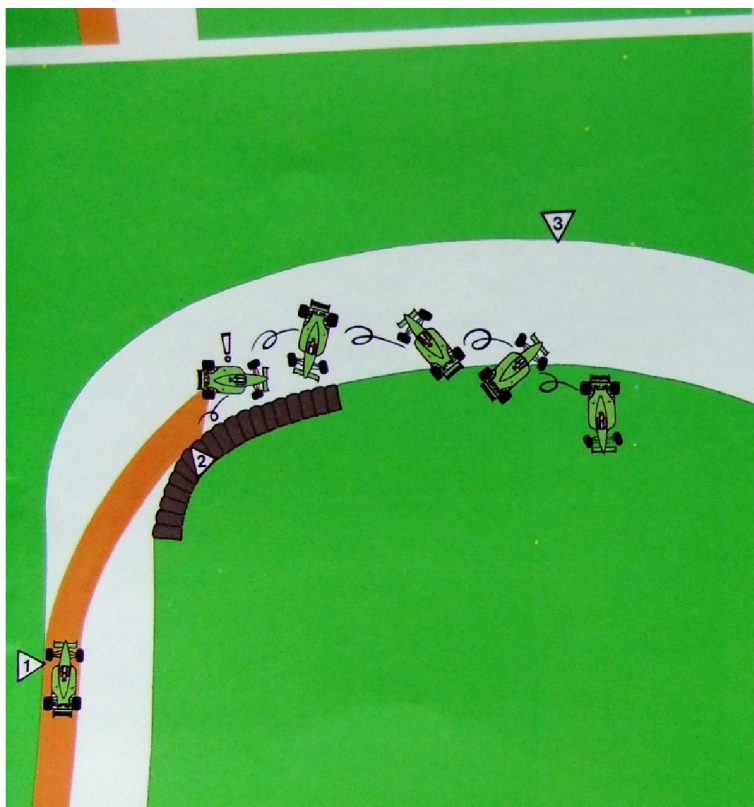
Los precios de los karts empezaron a subir, así como los precios de los neumáticos y motores que usaban.

Los pilotos empezaron a ser cada vez más especializados en el pilotaje derrapando a altas velocidades en las curvas y el espíritu original de este deporte se fue perdiendo para convertirse en otra especialidad más del automovilismo ,

cada vez más cara y en manos de bestias del derrapaje controlado.

Esta tendencia ha seguido en las décadas siguientes, con muchos pilotos futuros de la fórmula uno que se han formado pilotando de esa manera en el karting.

Nosotros preferimos el estilo clásico de los años 60, cuando las velocidades eran menores y los karts eran baratos .



PÉRDIDA DE CONTROL DESPUÉS DEL PUNTO DE CUERDA

La diferencia fundamental respecto al ejemplo anterior estriba en que la pérdida de control después del punto de cuerda se produce cuando el monoplaza está en plena aceleración, lo que aporta mayor virulencia a los trompos que describe. La curva general que trazará lo mandará claramente hacia el interior, a la salida del viraje.

Si, y de la misma forma que en el caso anterior, el piloto frena bruscamente en cuanto percibe la pérdida de control de su coche, tendrá más opciones de mantenerse en pista; esto se debe al hecho de que la serie de trompos sigue un redondeado general que se inscribe más tiempo dentro del viraje en sí.



PÉRDIDA DE CONTROL

ANTES DEL PUNTO DE CUERDA

En términos generales, cuando la pérdida de control tiene lugar en el primer tramo del viraje, y por tanto antes de la cuerda, el coche se dirige hacia la parte exterior de la curva.

A menos que se trate de una avería mecánica (en cuyo caso el monoplaza seguirá recto sin tan siquiera ponerse de través) o de un grave error de pilotaje (sobreestimación total de la velocidad de entrada), un coche que ha perdido el control conserva una cierta inercia a lo largo de todos sus trompos y describe así una especie de redondeado paralelo al viraje propiamente dicho.

Desde el momento en que el piloto percibe la pérdida de control de su monoplaza, debe imperativamente frenar al máximo y sin reserva, hasta la parada completa. Con un poco de suerte, ésta se efectuará sobre la pista, y de lo contrario habrá permitido, al menos, limitar la velocidad de salida de la calzada al exterior del viraje.

much the actual line to be taken should deviate from the ideal line of the greatest constant radius that can be inscribed into the particular portion of road under consideration, entirely depends on the performance of the car. If it has only just enough power to move it along the curve at the highest speed at which the bend can be taken, but cannot be accelerated any further, the ideal line of constant radius is the obvious choice. If, on the other hand, the car is capable of very high acceleration, it will be advantageous to increase the curvature of the line quite considerably upon entering the bend, in order to be able to straighten it in the second half of the curve so as to make full use of the car's acceleration. For a car with a performance between these

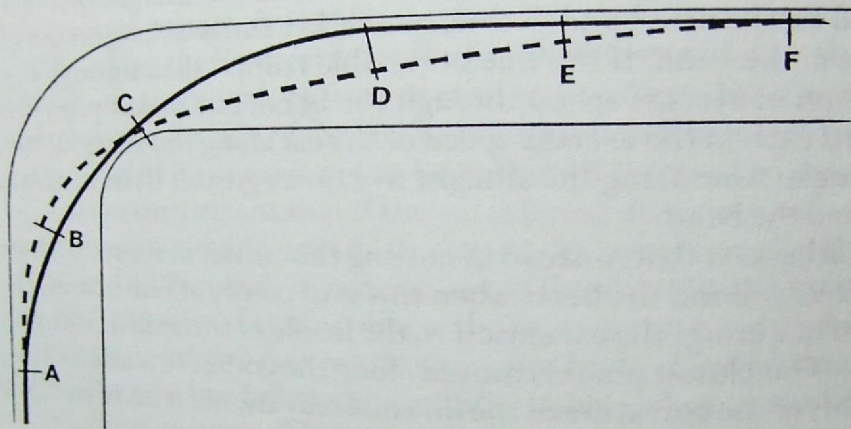


Fig. 21. If it enters the curve (at A) at the highest possible speed allowed by its adhesion, a car that follows the line of constant radius (solid line) cannot exceed this speed until the end of the curve is reached (at D). A car that follows the dotted line of variable radius must slow more to enter the corner, because its curvature is more accentuated. If the curve can be taken at 80 mph along the solid line, the speed of a car following the dotted line will be less at B (say 78 mph). But from C on, the car following this line can be accelerated. At D, its speed may already have reached 85 mph, when the car following the solid line is only just finishing its constant curve at 80 mph and can only now be accelerated. At E and F, and all along the following stretch, the car on the dotted line will be the faster.

two extremes, an intermediate line will give the best results. The benefit of taking a line of markedly variable curvature is particularly obvious on hairpin bends, which are taken by most fast cars in first gear, on which the acceleration is usually very quick.

FROM SLIPPING TO SLIDING

There is no clearly defined borderline between the so-called four-wheel drift and a proper slide or skid. In racing parlance, however, a car is usually said to be drifting when its front wheels are still more or less pointed in the direction of the bend to be taken, or, in marginal cases, are straight (Fig. 51); the slide proper starts when the driver has to correct the line of progress by turning the front wheels into the opposite direction to the curve to be taken. From this it follows that only an understeering car can be drifted, as in most other cases the rear slip and slide angles will add up to such a total compared with the front slip angle, that the front wheels will have to be turned out slightly to compensate for the difference. If they must be turned out so much that they point in the opposite direction to the bend to be taken, the drift is turned into a slide or a skid.

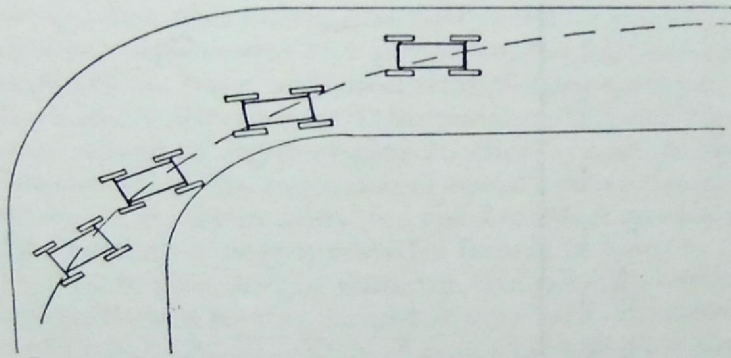


Fig. 40. The yaw angle formed by a car rounding a bend in a drift, brings the vehicle in line with the straight following the bend before it has actually completed the curve.

The drift is the position which a properly designed under-steering car assumes automatically when it is being cornered near the limit while sufficient torque is applied to the rear driving wheels—at least enough to keep up its speed. It is obviously dependent to a certain extent upon the ability and the judgement of the driver, but, within certain limits, it is a state of stable equilibrium. When a car rounds a curve at a speed low enough for the slip to be negligible, the center O of the curve it describes is in line with the rear wheel axis, where it is joined by the lines drawn at right angles to the plane of the front wheels. As soon as the rear wheel slip goes over into slide, this point does not correspond any more with the center of the actual curve taken by the vehicle. It moves to O_1 which lies ahead of the rear wheel axis. Figure 41 shows that if the car were moving around the center point O , that is without drifting or sliding, it would very soon hit the inside of the curve; in actual fact moves around O_1 . This changes the direction of the centrif-

gal force from OG to O_1G , where it forms a much smaller angle in respect to the planes of the wheels. Assuming in both cases the value of the centrifugal force to be identical, the value of the component acting at a right angle to the wheel planes is reduced. It gives rise, however, to a comparatively important component acting in the plane of the wheels and opposing the rolling motion of the car, tending to slow it.

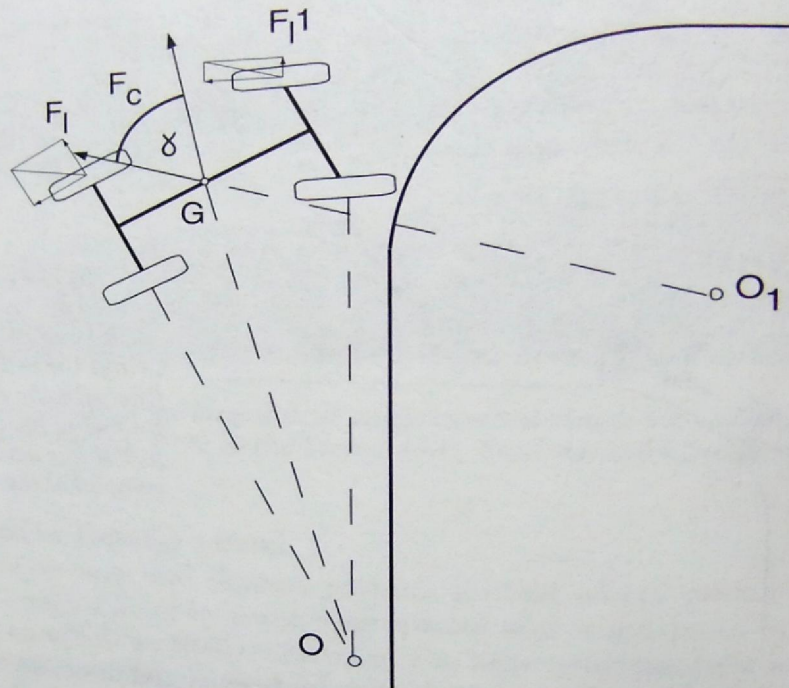


Fig. 41. Car in a four-wheel drift. The greater the yaw angle γ , the smaller become the lateral components F_{c1} and F_{c2} of the centrifugal F_c acting upon the wheels, while the components acting backwards in the plane of the wheels are increased.

As long as the driver does not modify the steering lock or the torque applied to the driving wheels, the car remains in a state of balance created by the various forces acting upon it. If, for any reason, the rear wheels were to drift out more, which would happen for instance if the driving torque were increased, thus decreasing the resistance of the rear axle to lateral forces, the car would assume a greater yaw angle (γ), thereby automatically reducing the component of the centrifugal force acting at right angles to the plane of

Some corners may involve a problem for a driver new to them. Not all are ideally shaped or regularly banked. Some may have an irregular contour, more bends in the same direction, which are best taken in one single sweep. In such cases, the correct line through the corner does not necessarily bring the car nearest to the inside verge more or less half-way through the bend, and the correct point to aim at is not always easy to find.

If the driver finds he loses times on a particular portion of the circuit because he has failed to find the best line through it, he should not hesitate to follow a more experienced driver through it or, after the end of the first practice session, to inspect it thoroughly on foot in order to understand the exact shape of the road and to try to visualize the line along which it should be negotiated. Once he has decided on the line that should give the best results, he should try to find some landmark, as close as possible to the inside verge, at which to aim his car, to make sure that he keeps to his predeter-

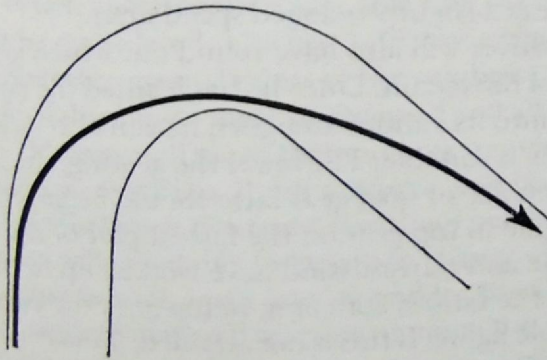


Fig. 47. Curve of decreasing radius.

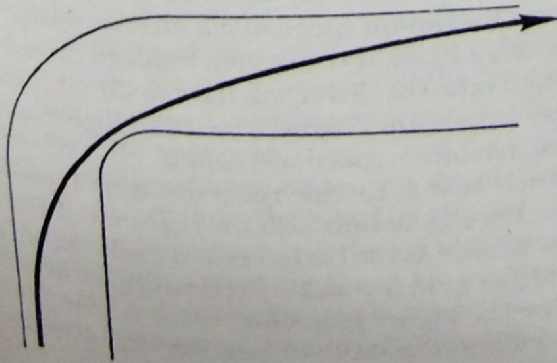


Fig. 48. Curve formed by tracks of unequal width. Same line as for curve of increasing radius.

**No nos gustan los karts actuales,
demasiado rápidos , demasiado perfectos,
que matan el deporte al tragarse como si
nada las curvas.**

**Además la mayoría de los circuitos de
karts en España están mal hechos, con
demasiadas curvas cerradas y mal
diseñadas,**

**aunque hay alguna excepción como el
karting de San Javier en Murcia, uno de
los pocos que tiene las curvas bien
trazadas.**



Por otra parte, ha surgido desde hace años un tipo de kart para turistas que es una estafa, porque no corre y es un aburrimiento mortal.

Este tipo de karts lo alquilan en los nuevos circuitos que se han hecho últimamente dentro de naves industriales y patrocinados por famosos pilotos.

Estos karts no valen nada y solamente son aptos para que los piloten niños.

Un kart debe poseer algo de fuerza en el motor y velocidad, para que el piloto pueda trabajar con el volante en las trayectorias de las curvas.

Con un kart de verdad , no los que alquilan para turistas en los kartings de la costa, se pueden experimentar muchas de las sensaciones que conocen los pilotos de la fórmula uno :

la rivalidad contra los otros karts que están en la pista,

la búsqueda del límite de frenada,

la búsqueda de referencias en la pista para decidir dónde hay que frenar,

las técnicas de contravolante,

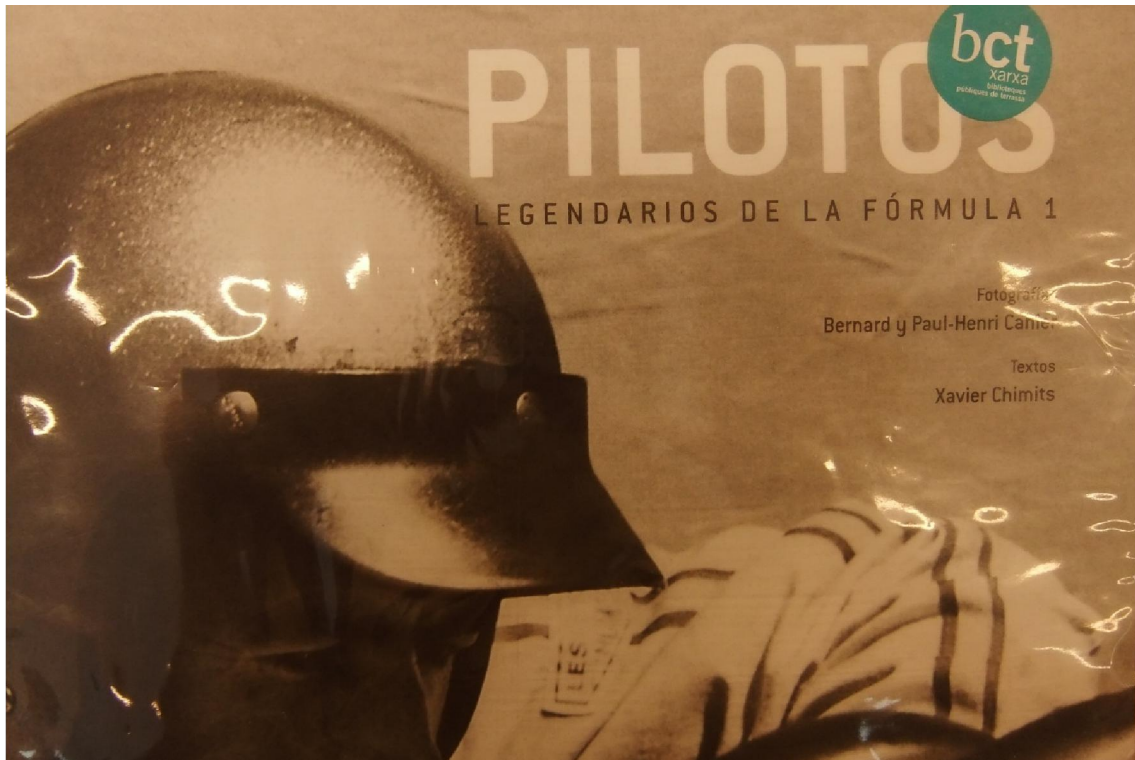
las estrategias de carrera ,

la necesidad de no cometer errores

y de estar en buena forma física para resistir las fuerzas de la gravedad al pasar por las curvas

y aguantar las brusquedades del kart (que no tiene suspensión).

Como explica este excelente libro de Xavier Chimits , , las personalidades de los grandes pilotos de la historia influyen en su respectivo estilo de pilotaje :



PILOTOS

LEGENDARIOS DE LA FÓRMULA 1

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xarxa
biblioteca
pública de barcelona

Fotografía
Bernard y Paul-Henri Camille

Textos
Xavier Chimits

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PARA LOS PILOTOS EN ACTIVO:
RECIENTOS REALIZADOS HASTA EL ÚLTIMO

LOS TÉCNICOS		LOS CONSTANTES		LOS ROMÁNTICOS	
6 a 40		42 a 76		78 a 113	
Albero Ascari	10	Jack Brabham	46	Mike Hawthorn	82
Juan Manuel Fangio	14	Graham Hill	50	Jochen Rindt	86
Jim Clark	18	John Surtees	54	James Hunt	90
Emerson Fittipaldi	22	Michael Schumacher	58	Keke Rosberg	94
Nelson Piquet	26	Damon Hill	62	Ayrton Senna	98
Tony Brooks	32	Jo Bonnier	68	Peter Collins	104
Carlos Reutemann	33	Maurice Trintignant	69	Piers Courage	106
Jacky Ickx	34	Jo Siffert	70	Andrea de Cesaris	107
Elio de Angelis	36	Jacques Laffite	72	Johnny Servoz-Gavin	108
Michele Alboreto	37	Bruce McLaren	74	Alfonso de Portago	110
Jenson Button	38	David Coulthard	75	Eugenio Castellotti	112
Lewis Hamilton	40	René Arnoux	76	Innes Ireland	113

Foto de cubierta:
Jack Brabham, 1967
Foto de contraportada:
Ferrari, 1961

Habían pilotos como Jabouille que era ingeniero y estaba interesado sobre todo por los problemas técnicos a resolver en los motores turbo,

pilotos como Gilles Villeneuve o Ronnie Peterson que corrían para hacer acrobacias con su auto ,

pilotos como Graham Hill que sin tener mucho talento aprendían el oficio tras mucha constancia y años,

pilotos científicos que corrían analizándolo todo , como Prost o Lauda,

pilotos locos como Pedro Rodríguez el azteca que corría jugando sucio para sacar a sus rivales de la pista,

pilotos románticos como Mike Hawthorn y Peter Collins que corrían por la belleza de las carreras y de su amistad,

pilotos profesionales como Stirling Moss o Jackie Stewart que gestionaban su carrera y sus ingresos

con sus managers ,

pilotos como Mario Andretti que conducían cualquier cosa que llevara ruedas y les diera placer,

pilotos play-boy como James Hunt y Alfonso de Portago que corrían por todo lo que acompañaba a este mundillo: las chicas, el dinero, el éxito, la gran vida,

pilotos cultos como Phil Hill (amante de la ópera) ,

Farina

(doctor en ciencias políticas) ,

Wolfgang Von Trips (conde)

o Tony Brooks

(dentista)

**que corrían solo por el arte del pilotaje y
no querían convertirse**

**en “ animales de sacrificio” para contentar
a managers de equipos y a un público
enloquecido que querían ver a pilotos
atrevidos,**

**pilotos rudos que representaban al
hombre medio de su país, como Alan
Jones, típico australiano medio, casi de
ultraderecha, partidario de la pena de
muerte, que siempre hablaba con mucha
lengua suelta, al que no le gustaban los
franceses porque decía que siempre
hacían trampas, ni le gustaba Inglaterra
porque decía que siempre se resfriaba allí,
ni le gustaba Europa porque decía que
estaba en la decadencia comparada con la
felicidad de su Australia,**

pilotos a los que no les gustaba pilotar en carrera y se lo pasaban mejor entrenando sin nadie en la pista, buscando la mejor puesta a punto del auto, pilotando con finura y precisión durante vueltas y vueltas siempre marcando los mismos tiempos y pasando por las mismas trayectorias

y que en carrera se desanimaban si les pasaba

otro auto ,

como Reutemann , Ascari , Jim Clark o Chris Amon ,

pilotos que tenían un don natural único, como Fangio y Ayrton Senna y lo exhibían en las carreras que ganaban , sin que los otros pilotos llegaran a entender cómo lo hacían,

pilotos con una ambición desmadrada por ganar, por algún conflicto que ellos o sus antepasados tuvieran con el mundo , necesitaban ganar todas las carreras humillando a sus rivales y solamente vivían para esto,

pilotos que solamente daban lo máximo de sí mismos cuando se encontraban en un ambiente favorable, amistoso y caballeroso (un ambiente que casi siempre brilla por su ausencia en el sucio mundo de las carreras de autos) y que se hundían cuando sus rivales practicaban el juego sucio psicológico contra ellos

o intoxicaban el ambiente para que no pudieran rendir al máximo de sus posibilidades,

pilotos como Froilán González y Clay Regazzoni que no corrían para ganar carreras ni el campeonato sino para

batirse con los otros pilotos en la pista y pasarlo bien,

pilotos como Jack Brabham, Bruce Maclaren o John Surtees que estaban más interesados en desarrollar sus propios autos que en ganar carreras.

En una pista de karts te puedes encontrar con tipos parecidos a todos estos.

Hay el que solo corre para pasar el rato sin llegar a su límite de sus posibilidades ,

hay que el que corre para ganarlo todo y se gasta mucho dinero en neumáticos y motores nuevos para cada carrera,

hay el que es hijo de un tipo que quería ser piloto de fórmula uno y que, como no pudo serlo, le paga a su hijo todos los gastos para que gane todas las carreras y llegue a la fórmula uno,

hay el que es el favorito de un fabricante de karts que le da el mejor material disponible para que gane y haga propaganda de esa marca de karts,

hay el que solo corre para exhibir lo bien que derrapa en las curvas,

hay el que corre para desarrollar el kart perfecto con el chasis perfecto y el motor perfecto,

hay el que corre peligrosamente y jugando sucio, golpeando a los otros karts y sacándolos de la pista ,

hay el que se cree que es un genio porque su kart es el que se “traga” mejor las curvas derrapando,

hay el que es un técnico fanático y busca las mejor técnica para tomar cada curva y lo anota todo en su bloc de notas,

hay el que es todo músculos y pilota a base de fuerza de los brazos, obligando al volante y al kart a ir por donde él quiere,

hay el que es todo lo contrario y pilota casi sin mover el volante, dejando deslizar su kart en las curvas,

hay el que es un sediento de la velocidad y no puede vivir sin sentir el viento en su cara y sentir cómo se desplaza su cuerpo como si casi volara,

hay el que se cree que conducir un kart es adelantar a los otros pilotos por cualquier sitio, frenando el último y

**metiéndose por cualquier resquicio que
deje el piloto de delante suyo,**

**hay el que necesita respirar humo de
aceite quemado mezclado con gasolina
porque si no, no se encuentra a gusto,**

**hay el que siempre se está comprando el
último carburador, freno, neumático,
chasis, motor , artilugio o componente del
kart que haya salido al mercado y que
cree que le va a dar una ventaja sobre los
demás pilotos,**

**hay el que prefiere frenar antes de la
curva y salir de ella lo más rápido posible
y hay el que prefiere frenar lo más tarde
posible en la curva y salir de ella sin haber
perdido tiempo,**

**hay el piloto nervioso que desde la salida
intenta pasar a todos los otros pilotos por
todos los sitios y hay el piloto tranquilo
que espera los acontecimientos para ir**

ganando posiciones a lo largo de la carrera,

hay el piloto intoxicador que está detrás de ti casi tocándote para ponerte nervioso y obligarte a cometer algún error

y hay el piloto que una vez te ha pasado, busca separarse de ti para que te desanimes al ver que no puedes seguirlo.

Si el circuito de karting es tan interesante como algunos de los circuitos clásicos de la fórmula uno

(no como los aburridos circuitos actuales) ,

el participante en carreras de karts puede conocer de una manera bastante parecida lo mismo que sienten los pilotos de fórmula uno :

al esforzarse para mantener una posición durante una carrera,

alcanzar a un piloto que está delante

o para que ese piloto no se distancie de uno ,

o para encontrar la técnica de pilotar en cada curva en que no pierda tiempo en esa curva

y marque el tiempo en cada vuelta lo más bajo posible pilotando lo más rápido posible.

